BRITISH HONDURAS

ANNUAL REPORT

OF THE

AGRICULTURAL DEPARTMENT

FOR THE YEAR

1960

Printing Department—British Honduras.

CONTENTS

PART I

Policy	Paragraph 1
Weather Conditions	2 - 6
CROPS	
Citrus	7 - 10
Sugar Cane	11 - 15
Coconuts	16 - 18
Bananas	19
Cacao	20 - 25
Rice	26 - 31
Maize	32 - 34
R.K. Beans	35
LIVESTOCK	
Cattle	36 - 38
Pigs	39
Poultry	40
Beekeeping	41
Treatments given Livestock	42
Slaughter House Return	43
Marketing & Agricultural Credit	44 - 46

PART II

WORK OF THE DEPARTMENT

Staff	47 - 49
Overseas Training & Courses	50 - 52
Agricultural Education	53 - 55
4-H Club Activity	56 - 58
Extension Work	59 - 60
DISTRICT AGRICULTURAL STATIONS	
Toledo	61 - 65
Stann Creek	66 - 69

Orange Walk 70 - 74

Belize 75 - 79

Central Farm 80 - 85

San Roman Cane Station 86

Tables showing sale of plants, livestock and mechanical work done for farmers 87

Veterinary section 88

Land Clearing Unit 89 - 91

Research 92 - 108

Finance 109

Visitors 110

APPENDICES

LIVESTOCK TREATMENTS

SLAUGHTER HOUSE RETURNS

METEROLOGICAL DATA

SUMMARY OF RAINFALL

AGRICULTURAL IMPORTS - VALUE

AGRICULTURAL EXPORTS - VALUE

LOCAL WEIGHTS AND MEASURES

--*-*-*

ANNUAL REPORT OF THE AGRICULTURAL DEPARTMENT FOR THE YEAR 1960

PART I

A Committee was appointed in July to enquire into the functions, staffing and financing of the Department of Agriculture. Its report was submitted in November and, pending a decision by Government, policy objectives remained unchanged.

WEATHER CONDITIONS

2. Rainfall for the year was above average and well distributed.

3. Orange Walk reported that conditions were favourable for milperos, enabling a good burn before corn planting. In Toledo however heavy rain at the time of planting resulted in poor germination and eventually a small crop. Conditions in this District however were suitable for rice growing.

4. In the Belize District, the Belize and Sibun Rivers remained in partial flood for a period of 3 to 4 months, continuing almost to the end of the year.

5. On July 15th, Hurricane "Abby" struck a localised area in the south of Stann Creek District, causing damage to crops estimated at some $75,000. Winds from this hurricane extending outwards in the southern quadrant caused damage to corn plantations in Toledo District.

6. Total rainfall varied from 38.69" in August Pine Ridge in Orange Walk District to 200.38" at Barranco in the south of Toledo District. Rainfall records are shown in Appendix I.

CROPS

CITRUS

7. Acreage under cultivation was 4186.42 for oranges and 1189.06 for grapefruit. Of this, there were 3940.94 acres of bearing oranges and 861.28 acres of bearing grapefruit.

8. During the year, the factory purchased 436,694 boxes (90 lbs.) of oranges and 227,973 boxes (80 lbs.) of grapefruit.

Citrus exports are shown in Table I.

TABLE I

GRAPEFRUIT	UNIT	TOTAL MANUFACTURERS QUANTITY AND UNITS	
Fresh	A2	47,463	cases
Sections	A2	146,633	cartons
Juice Sweetened	A2 3 Imp. gallons	8,053	cartons
Juice Sweetened	A10 4 Imp. gallons	27,577	"
Juice Unsweetened	A10 4 " "	7,846	"
Concentrate 4/1	A10 4 " "	23	"
Concentrate 4/1	43 " "	550	barrels
Oil in cases	50 lbs. net	1,900	lbs.

17. Statistics showed that there were 860 cocals with 11,072 acres planted. These contained 500,374 trees, of which 264,086 had not yet come into bearing. 236,288 bearing trees gave a total estimated production of 2,368,265 nuts. Red Ring Disease was indentified in 56 cocals and Gru Gru in 32.

18. Exports were:

(a) 85,324 lb. of copra, chiefly to Guatemala with smaller amounts to Jamaica and Panama. Total value $8,087.

(b) 904,700 whole nuts - U.S.A. (876,700), Holland (25,000), and Guatemala (3,000) Total value $46,825.

(c) 79,700 lb. of dessicated coconut to the U.S.A. Total value $5,570.

BANANAS AND PLANTAINS

19. The small plantation at Waha Leaf Creek is the only regular exporter of bananas. No shipments were made during the year, as the plantation was damaged by Hurricane "Abby" on 15th July. The "Gros Michel" variety originally planted, is gradually being replaced by the Cavendish "Golden Beauty" variety, which is not susceptible to Panama Disease. A regular spraying programme for control of Leafspot, is in operation.

CACAO

20. A new shed with a capacity for 52,000 plants was erected during the year. The station now has two such sheds, and it is not proposed to erect any more until the demand for plants warrants expansion.

21. 7,669 hybrid seeds were obtained from Trinidad. They comprise IMC 67 ICS 1 x SCA12, SCA 9 x IMC 67 and ICS 9 x IMC 67.

22. 14,677 stems and 1,247 leaf cuttings were produced from the station clonal nurseries, and a total of 54,942 plants were sold to growers.

23. A further 181 acres was planted up during the year, with material supplied from the Cocoa Station. This brings the total acreage planted since 1957 with seedlings supplied by the Department, to 547 acres.

24. "Cushion Gall" disease has now been identified in most of the cocoa areas. Incidence is high on the C.D.C. plantation at Alta Vista, where rate of spread is rapid. In other areas such as the Hummingbird Development, Middlesex and Canada Hill, rate of spread is slow.

25. 15 tons of cocoa beans valued at approximately $15,880, were exported from British Honduras to the United Kingdom during the year.

RICE

26. Acreages planted to rice in the various Districts were estimated to be:-

Toledo District	1,512
Stann Creek	14
Cayo	135
Belize	1,047
Orange Walk	117

TOTAL 2,825 acres.

27. Because of the failure of the rice crop in the Belize District in 1959 due to an attack of Hoja Blanca disease, the Government with the assistance of the International Cooperation Administration imported seed of the Gulf Rose variety said to be resistant, and distributed this amongst farmers. Approximately 11,500 lbs. were issued to some 616 farmers.

28. At the same time a Hoja Blanca Research programme was started by the Department on lands belonging to Tennessee Agriculture Ltd.. Some 1700 sets of seeds from the United States Department of Agriculture were laid out in plots, together with a further 182 resistant varieties from Cuba, I.C.T.A., El Salvador, and West African Rice Research Station.

29. There was no evidence of hoppers (Sogata arizicola) until late July. A few hoppers with eggs were observed in August, but because there was no increase of hopper population, results were considered inconclusive, and it was decided to repeat the trials in 1961.

30. Dr. H.A. Lamey, Plant Pathologist from the U.S.D.A.. ARS Division engaged on investigation into Hoja Blanca infestation in Latin America and in the United States, visited in August to check on the plots. He confirmed that Blue Bonnet 50 and the local British Honduras Creole varieties had Hoja Blanca.

31. Marketing Board purchased a total of 1,552,462 lbs. of paddy from farmers throughout the country during the year.

MAIZE

32. Acreages planted to maize in the various Districts were estimated to be:-

Toledo	3103
Cayo	3531
Orange Walk	4604
Belize	135
TOTAL	11,373 acres

33. 1960 was a bad year for maize production. In Toledo heavy rains at the time of sowing, resulted in poor germination, and later, standing corn suffered as a result of Hurricane "Abbey". In Belize, heavy and prolonged flooding of rivers caused considerable damage to planted corn.

34. Marketing Board were only able to purchase a total of 133,177 lbs. of maize. No maize was purchased in Toledo.

R.K. BEANS

35. A total of some 454 acres throughout the country was planted to R.K. Beans. Weather conditions were unfavourable and results were poor, and so farmers did not have much produce to sell to Marketing Board. Total purchases by the Board amounted to 115,701 lbs., mostly from Toledo.

LIVESTOCK

36. CATTLE

The Livestock Subsidy Scheme for which funds were made available under C.D. & W. Grant (Scheme 3504) commenced in April, 1958, and with an extension of 3 months, terminated in December 1960. Figures of expenditure are set out in Table III below.

TABLE III

Item	Subsidy $	EXPENDITURE 1958	1959	1960
Pasture Subsidy) Livestock Subsidy)	110,000	415	34,521	19,758
Livestock Investigation	30,000	4,416	17,777	6,474
Livestock Purchase	40,000	10,517	23,487	482
	$180,000	$15,348	$75,785	$26,714

37. As a result of this Livestock Subsidy Scheme there has been a marked difference in pasture management. Stock owners recognising the advantages to be had from better grasses, and with assistance from the subsidy scheme, have in most districts, but particularly in Cayo, planted up pastures to Jaragua, (Hyparrhenia rufa) Guinea (Panicum maximum) and to a lesser degree Pangola (Digitaria decumbens).

38. The Department have continued with the policy of trying to upgrade the local cattle by using pure Brahman Bulls. Many private cattle owners throughout the country have done likewise, and have imported pure bred Brahman bulls and heifers for this purpose. Some of the larger cattle owners have also imported Santa Gertrudis and Brangus bulls, and these appear to be giving satisfactory results.

39. There is really no organised pig industry in the country. By far the largest number of pigs are raised by the Maya and Kekchi Indians in the Reserves in Toledo District. This district supplies the bulk of pigs slaughtered in Belize. Here they are raised on a free range. The Department has endeavoured by supplying good boars, to improve the local stock.

POULTRY

40. There was an increase in the poultry population. The Mennonite Community and some local farmers stepped up the production of broiler chickens. Day old chickens were imported in greater numbers from hatcheries in Florida U.S.A.. Custom Department figures reveal imports of 73,385 chickens valued at $26,584.00. As a result of this expansion, larger quantities of dressed chickens and fresh eggs were available in the markets, and prices were below those of last year.

BEEKEEPING

41. There was an increase in the number of apiaries during the year. Figures are given in Table IV.

During the year production of honey amounted to 61,776 lbs. of which 49,302 lbs. were exported to London by the Marketing Board, on behalf of the beekeepers. They received a price of .13¢ B.H. a lb.. The balance was sold locally, the Menonnite Community buying 12,474 lbs. at $100.00 a drum.

TABLE IV

DISTRICT	APIARIES	HIVES	BEEKEEPERS	PRODUCTION
Corozal	51	655	29	29,700 lbs.
Orange Walk	17	642	10	25,542 lbs.
Belize	10	232	10	6,534 lbs.
Cayo	4	28	3	-
Stann Creek	5	14	2	-
TOTAL	87	1571	54	61,776 lbs.

42. A list of the main treatments carried out by Farm Demonstrators and Livestock Assistants are given in Appendix I.

43. Slaughter House returns for the country are shown in Appendix II.

MARKETING AND AGRICULTURAL CREDIT

44. The Marketing Board again offered guaranteed prices to farmers for Corn, Paddy, Red Kidney Beans, Annato and Black Eye Peas. In addition it arranged for the shipment and sale of honey in the United Kingdom for beekeepers.

45. During the year the Board purchased the undermentioned produce from farmers:

Paddy	1,552,462 lbs.
R.K. Beans	115,701 lbs.
Corn	133,177 lbs.

46. 20 loans totalling $86,106 were approved by the Agricultural Credits Fund Committee. Of this amount only $32,228 were actually issued. The loans were for the following projects:-

Livestock and pastures 4, Citrus 2, Cocoa 3, Coconuts 2, Farm Equipment 3, Fertilizer & Pesticides 1, Buildings 1, Mixed Farming 2, Transport 1, Drainage 1.

PART II

WORK OF THE DEPARTMENT

STAFF

47. Mr. A.N.C. Thomas B.Sc. Senior Agricultural Officer acted as Director of Agriculture during the year.

Mr. M.K. Chopin B.A., Agricultural Officer, Stann Creek was appointed Chief Extension Officer, and proceeded on leave to United Kingdom in March. On his return in August he was appointed acting Senior Agricultural Officer and posted to Central Farm.

Mr. R.S. Pitt B.S.A. was posted to Stann Creek as Agricultural Officer in March, and from June was also in charge of the Cocoa Section of the Department.

Mr. G.L. Ogilvie, Cocoa Officer proceeded on leave to Grenada in June.

48. RESIGNATIONS AND RETIREMENT

Mr. R.E. Keogh M.A. Agricultural Officer Belize proceeded on leave in April and resigned from the service.

Mr. R. Mackenzie M.R.C.V.A. Veterinary Officer proceeded on leave to United Kingdom in March/April and resigned from the service.

Mr. D.H. Romney B.Sc. Agricultural Chemist proceeded on leave in July and resigned from the service.

Mr. I.S. Hazell M.A. resigned from the service and left the country in September.

Mr. S.J.A. Williams B.S.A., Agricultural Officer Toledo, applied for a transfer, and left the country in September. He resigned the service on securing a post on the Teaching Staff of the Eastern Caribbean Farm Institute, Trinidad.

Miss P. Espejo, Technical Assistant (Publications) resigned from the service in August.

Mr. F.F. Orio Sr. Assistant Agricultural Officer, retired in September.

NEW APPOINTMENTS

49. Mr. B. Walker B.Sc. joined the Department as Cane Farming Officer in March, and after a short stay at Headquarters, Central Farm, was posted to San Roman Cane Research Station, Corozal.

Mr. D.P.H. Tucker B.Sc., Agronomist, from the Macaulay Institute, Aberdeen, was appointed and joined the Department on 4th October.

Mr. S.D. Wilkie M.R.C.V.A. Veterinary Officer, joined the Department towards the end of October.

OVERSEAS TRAINING COURSES & CONFERENCES

50. Mr. R. Hill M.A. (Cantab) Agricultural Education Officer attended an Extension Seminar organized by the International Cooperation Administration in Georgetown British Guiana from 11th to 27th January. He was accompanied by Senior Farm Demonstrator Mr. J. Swasey.

51. Farm Demonstrator F.B. Arana returned to British Honduras in June, after successfully completing the two year Diploma Course at the Eastern Caribbean Farm Institute in Trinidad. He was posted as Warden and Tutor at the Agricultural School Central Farm.

52. Mr. M.K. Chopin B.A. Chief Extension Officer, whilst on leave in the United Kingdom attended a two weeks course in June at the Overseas Visual Aid Centre in London, and later attended the Colonial Office Conference on Agricultural Advisory Methods at Cambridge, in July.

AGRICULTURAL EDUCATION

53. After touring all Districts to interview prospective candidates for the 9 month agricultural course, the Agricultural Education Officer selected 16 young men, who joined the Agricultural School in February.

54. The Course was divided into terms of three months duration each. Theoretical and later practical application of all subjects covered, was given. Students were taken on tour to different districts for on the spot lectures in the major industries viz. Citrus in Stann Creek and Cane in Corozal.

55. All sixteen students took the examination and were successful in obtaining the Certificate of Proficiency.

56. 4H-Club Activity

During the year three 4-H Clubs with a total membership of 136 functioned in Benque Viejo and Succotz in the Western District of Cayo. A senior Future Home Makers Club with a membership of 35 was also formed. Regular fortnightly meetings and an Annual 4-H Day of Health were held.

57. The staff connected with 4-H Clubs during the year were one Farm Demonstrator Grade I, one Farm Home Economics Demonstrator, two Assistant Farm Home Economics Demonstrators and one Voluntary Leader.

58. It is with deep regret that I record the death of Mr. Perry H. Jameson of the International Cooperation Adminstration in the United States of America. Mr. Jameson endeared himself to the people of this country he came in contact with, and was instrumental in starting the 4-H Club movement in the Western District, in whose activities, he played an active part.

EXTENSION WORK

59. Extension Staff based on District Agricultural Station continued to give advice to farmers in their respective areas and carried out land inspections for Location Tickets. They also assisted farmers with simple stock hygiene, helped with spraying and treating cattle for minor ailments.

60. Advice was given on use of fertilisers, budding and grafting of fruit trees, drainage in orchards and assistance in controlling the depredations of the "wee wee" ant. (Atta sp.) and "Drunken bayman bee" (Melipone sp)..

DISTRICT AGRICULTURAL STATIONS

TOLEDO

61. Mechanical units from the Department worked on ploughing and harrowing and planting approximately 100 acres and drilling 54 acres at the Dump for rice cultivation. 38 farmers availed themselves of these services.

62. San Antonio Soil Conservation Demonstration Plot.

A further 2½ acres were planted to coconuts making a total of 5.75 acres. The 4.5 acres of cocoa continues to make good progress and by the end of the year promises a good crop, as trees were laden with pods. The 8 head of cattle on the established 10½ acres of improved pastures on the plot did well during the year. The calf crop sired by the Red Poll bull amounted to 1 bull and 2 heifer calves.

Demonstration plot and pastures at Crique Sarco

63. Cacao, cashew and coconuts planted have made good growth, and appear suitable to the area. They have responded well to fertilisers and good management.

64. The 18 acres planted to Pangola and kudzu were subdivided into paddocks and both are growing well, showing promise of a good combination for pastures in this locality.

4 rural schools were supplied with fruit trees, grafted mangoes, budded Oranges, Dwarf coconuts and West Indian Cherries.

65. The station herds consisted of 1 Brahman Bull, 8 cows, 2 steers and 1 heifer & 1 bull calf. The Brahman bull was hired out to two farmers for a period of three months each.

STANN CREEK

66. Soil surveys of citrus orchards were carried out and individual fertilizer recommendations sent to 48 growers.

67. Staff were employed to carry out a survey of damage to crops and livestock after hurricane "Abby" in July.

68. Half an acre of yams planted on the station yielded 7000 lbs.. However, heavy rains affected this planting, as well as vegetables being grown at the station.

69. The station herd consisted of 1 Red Poll Bull, 19 cows, 14 heifers and 7 bull calves. These were successfully grazed on 16 acres of pangola subdivided into 8 x 2 acres paddock, 4.3 acres jaragua and 12 acres of natural grass.

ORANGE WALK

70. Though a large acreage was planted to corn, the most important crop of this District, yields were poor. Only 66,598 lbs. were offered for sale to Marketing Board.

71. The crop off 521 acres in Orange Walk and Corozal Districts planted to black beans, gave a fair output. Heavy rain at the time of maturing caused some damage.

72. 6 acres of peanuts planted in the Yo Creek area suffered from damage by wild animals.

73. 7 acres of broomcorn planted at Chan Pine Ridge did quite well, and straws were made into brooms and marketed in Belize.

74. A 6 acre plot was cleared at Yo Creek, the future site of the Agricultural Station, and a Farm Demonstrator's quarters erected. 2 acres of Dwarf Coconuts, one acre of Citrus and one acre of grafted mangoes were established.

BELIZE

75. Crops of corn, beans, rice suffered as a result of high and prolonged flooding of the main rivers Belize and Sibun.

76. Work on Hoja Blanca Resistant varieties was undertaken on private lands belonging to the Tennessee Agricultural Ltd.. Incidence was very low, so trials were really inconclusive, and are to be repeated in 1961.

77. First blossoming on mango trees never set due to cold wet northers which were experienced. Subsequent blossoming set and a fair crop was harvested.

78. Two small dairy farms operated during the year, and some 252,300 lbs. of milk produced was readily sold in Belize.

79. The Department purchased a new boat "Debbie Ann". This was powered by an Outboard Motor and used by the Agricultural Officer and Extension staff for visiting farms along the Belize and Sibun rivers and various inland lagoons.

CENTRAL FARM.

80. Most of the work during the year centred around preparing the pastures for the grazing trials it is hoped to start in 1961. The fencing programme started in 1959 was completed in February, when some 300 acres of newly planted pasture were fully enclosed giving some 16 paddocks, 12 for grazing trials and 4 run off pastures. Three quarters of a mile of 3/4" galvanised piping was laid down and water piped to 10 circular galvanised cisterns with a capacity ranging from 160 to 800 gallons each.

LIVESTOCK - CATTLE

81. All adult stock as well as the 1959 calf crop have been classified, branded and numbered, thus bringing herd records up to date. The 1960 calf crop totalled 70 calves born.

82. Three separate herds are maintained, these are: No. 1 Jamaica Red, for which a pedigree young bull "Bengel Hercules" was purchased during the year from Sir Leonard Hopwoods' herd in Jamaica. No. 2 Brahman Herd, with imported pedigree heifers and bulls from the United States and Jamaica, No. 3 The Cross Bred herd consisting of some 49 local bred cows mostly of Jersey strain running with a pedigree Brahman bull. Besides these herds there are 15 cows in the dairy herd. These are Jersey x local and Holstein x local and two local Jamaica Red. Average yield of 18 lbs. of milk per

day, with an average for one Jamaica Red at 30 lbs. per day for the period of lactation were recorded. No imported concentrates are fed, only locally produced feeding stuffs being used.

83. DAIRY PRODUCE - MILK

Supplied to Consumers.	Supplied to Calves.	Supplied to Pigs.
14,820 lbs.	27,365 lbs.	20,754 lbs.

Cream - 128 lbs.

TABLE V

Cattle Stock as at 31.12.60.

	BULLS	COWS	HEIFERS 1 year	MALES 1 year	CALVES 1960	STEERS UNCLASSIFIED	TOTAL
Red Poll	5	32	6	6	23	-	72
Brahman	4	20			3		27
Cross Breed	-	62	12	15	37		126
Steers	-	-	-	-	-	43	43
TOTALS	9	114	18	21	63	43	268

PIGS

84. The demand for Large Blacks is steadily increasing. During this year 17 young boars and 18 gilts were sold to farmers. Four pigs, 3 boars and 1 gilt were supplied to District Agricultural Stations. One large Black imported boar was destroyed on the recommendation of the Veterinary Officer, and one of this boar's male progeny has been retained at Central Farm to continue production of unrelated litters.

85. Two buildings were completed with funds provided in 1959. These were one for storing Livestock feeding stuffs, feed mixing concentrates, drugs and tools, measuring 18' x 56', The other was for storing fertilizers and for use as a farm store. This measured 39' x 19'.

SAN ROMAN CANE STATION

86. This new station comprising 25 acres, had 10 acres cleared laid out with buildings and 5 blocks planted to cane. An access road to the station was completed by P.W.D. and a 4.5 KW Diesel Electric plant was installed and current supplied to all buildings. A well was dug for a water supply, but the well until cased was continually caving in. However a good water supply was available throughout the dry season.

87. In the following tables records are given of vegetable seeds and plants sold from Agricultural Station Nurseries, Livestock sold to Farmers for breeding purposes, Livestock sold for butchering and work for farmers completed by Departmental mechanical units in different districts.

TABLE VI

Vegetable Seeds and Plants sold From Agricultural Station Nurseries.

STATION	VEG. SEED PKTS.	CITRUS SEEDLINGS	CACAO SEEDLINGS	TROPICAL FRUIT TRS.	GRAFTED MANGOES	COCONUTS TALL	COCONUTS DWARF	ORNAMENTALS
TOLEDO	284	56	3,020	-	42	949	-	-
STANN CRK.	1006	4,132	54,942	107	619	100	-	105
ORANGE WALK	2,225	422	-	383	-	1,545	-	6
CENTRAL FARM	-	888	-	95	20	-	706	882
BELIZE	-	-	-	-	-	-	-	-
TOTAL								

Figures for Cayo Station not available.

TABLE VII

Livestock Sold to Farmers for Breeding Purposes

STATION	Brahman & Local Bulls	Brahman & Local Heifers	Red Poll & Local Bulls	Red Poll & Local Heifers	Large Blk. Pigs Boars	Large Blk. Pigs Gilts	Berkshire Boars	Berkshire Pigs Gilts
TOLEDO	4	-	-	-	-	-	-	-
STANN CREEK	-	-	-	5	-	-	-	-
ORANGE WALK	-	-	1	-	-	-	2	8
CENTRAL FARM	-	-	-	-	3* 17	1* 18	-	-
TOTAL	4	-	1	5	20	19	2	8

* Supplied to District Agricultural Stations.

Butchering - 14 steers and 1 Boar was sold for butchering.

TABLE VIII

Work Done for Farmers by Departmental Mechanical Units.

STATION	Acres Ploughing	Acres Harrowing	Acres Drilling	Acres Bush Hogging	Acres Cambering	Hours Hauling
TOLEDO	100	100	54	3	-	-
STANN CREEK	46	65	-	94	15	-
ORANGE WALK	17	16	-	32	-	21
BELIZE	22	20	-	29	-	-
TOTAL	185	201	54	158	15	21

Figures from Cayo Station are not available.

88. There was a period of about 6 months when no Veterinary Officer was available. During this period this section was managed by Assistant Agricultural Officer, Mr. Orio, Livestock Assistant.

LAND CLEARING UNIT

89. Not much work was accomplished by the unit during 1960, due to the very wet conditions which prevailed most of the year. Because of previous commitments it was not possible to switch over fully to clearing on a tractor hour basis. Heavy units were moved from the Corozal District to Stann Creek where more work was available. Revenue made during the year amounted to $44,768.

90. Work accomplished was as under:-

Bushing	600 acres
Windrowing	600 acres
Heavy Harrowing	700 acres.

91. The Unit consisted of 4 Cat. D7 Tractors and 2 Cat D4 Tractors together with subsidiary equipment.

RESEARCH

92. Policy was the same as for the previous year namely to carry out investigation into the main economic crops of the country including Citrus, sugar-cane, coconuts, pasture, rice, corn, cacao and vegetable crops.

93. The Laboratory was engaged in routine analyses of pasture grasses for nitrogen, phosphorus and potassium, along with dry matter and protein % determination.

94. N.P.K. determination were also done on cane leaf samples taken at different stages from manurial experiments in the Corozal area.

95. Citrus leaves taken from trees in various citrus manurial trials in Stann Creek were analysed for N, P, K, Ca and Mg.. Orange fruits from experimental plots in Stann Creek were tested in the laboratories and determinations made of % juice, Brix and % acidity.

CITRUS

96. 9 Fertilizer trials mentioned in the 1959 report are still in progress, together with the 2 trace element trials. Results from the former trials are still inconclusive, but from the latter, which are non-statistical, applications of iron and zinc in spray and chelated form, and manganese in spray form, brought about a great improvement in leaf coverage, colour, and yield of fruit.

COCONUTS

97. Cultivation and fertilizer trials on Dwarf coconuts, local and St. Lucia talls is in progress at Central Farm. Cultivation consisted of the following treatments cambering, discing, ploughing, subsoiling and circle forking. No difference in growth as a result of these various types of cultivation was noticeable, but drainage has improved. The plants showed an excellent response to a complete fertiliser N P K, trees were uniform in height and number of leaves.

PASTURE

98. Grass introduction plots were all treated similarly with a cutting frequency of 3 weeks, and fertilising every 3 months, at 4 oz. of mixed NPK fertilisers per plot of 15' x 15'.

The following varieties in the plots have been outstanding:

(a) Cynodon Plectostachyus (Tanganyika) (b) Costal Bermuda (Trinidad) (c) Paspalum notatum (Tanganyika) (d) Cenchrus cilianis (Short Buffel grass) (e) Chloris Gayana Rhodes grass (Kenya). When sufficient planting material and seed is available, they will be planted up on larger areas and subjected to grazing.

GRASS TRIALS

99. The object of the trials was to determine the optimum dressings of nitrogen, and optimum time for cutting the three most important pasture grasses, namely, Guinea, Jaragua and Pangola. The following results show what rates of nitrogen in combination with different cutting intervals produce the highest yields of fresh herbage and highest protein contents. Highest protein contents were obtained in February for all varieties. Pangola maintained the highest protein content over an 8 months period followed by Guinea. Jaragua gave the best yield of fresh herbage over the same period.

TABLE IX

TREATMENTS

	SULPHATE OF AMMONIA			
	Per Application Per Plot	Per Acre	Per Acre per annum	Frequency of Application
6 N 1	4 ozs.	50 lbs.	400 lbs.	6 weeks
12 N 1	4 "	50 lbs.	200 lbs.	12 weeks
6 N 2	6 "	75 lbs.	600 "	6 weeks
12 N 2	6 "	75 "	300 "	12 weeks

Rainfall covering the 8 months cutting period was:-

Jan.	Feb.	Mar.	April	May	June	July	Aug.	
1.38	1.21	1.79	3.64	2.73	11.79	7.85	9.43	= TOTAL 39.83 inches

TABLE X

GRASS EXPERIMENTS RESULTS

Date of Cutting		6/1/60		19/2/60		29/3/60		10/5/60		20/6/60		1/8/60	
Pangola Grass	Treatment	Fresh Matter Yield	%N.	Fresh Matter Yield	%N.	Fresh Matter Yield	%N.	Fresh Matter Yield	%N.	Fresh Matter Yield	% N.	Fresh Matter Yield	% N.
	6 N1	15 lbs.	1.14	16 lbs.	1.63	12 lbs.	1.35	6 lbs.	1.11	13 lbs.	.90	28 lbs.	.70
	6 N2	27 "	1.28	20 "	1.52	22 lbs.	1.20	8 lbs.	1.07	15 lbs.	.96	32 lbs.	.75
	12 N1	7 "	1.07	13 "	1.56	13 lbs.	1.41	5 lbs.	1.03	7 lbs.	1.03	21 lbs.	.72
	12 N2	8 "	1.20	28 "	1.78	15 lbs.	1.21	7 "	1.02	10 lbs.	1.00	27 "	.69
	Control	-	-	6 "	1.23	3 "	1.12	4 "	-	6	.82	11 "	.86
Guinea Grass	6 N1	23 lbs.	1.36	30 lbs	1.59	16 lbs.	.76	12 lbs.	1.20	20 lbs.	.93	39 lbs.	.91
	6 N2	31 "	1.12	41 "	1.56	20 "	.52	9 "	1.25	23 "	.93	40 "	.80
	12 N1	13 "	1.24	36 "	1.53	13 "	.38	7 "	1.09	15 "	.98	30 "	.86
	12 N2	21 "	1.25	43 "	1.47	19 "	.41	8 "	1.25	19 "	.85	39 "	.73
	Control	-	-	10 "	1.27	8 "	.38	10 "	1.25	11 "	.85	29 lbs.	.88
Jaragua Grass	6 N1			45 lbs.	1.40			14 lbs.	1.14	27 lbs.	.71	52 lbs.	.49
	6 N2	Experiment		48 lbs.	1.32	Set Back Due		18 "	1.02	33 lbs.	.75	63 lbs.	.45
	12 N1	Commence		43 "	1.48	Dud to Cattle Damage		12 "	.98	22 "	.80	50 "	.49
	12 N2			53 "	1.51			17 "	1.07	27 "	.70	62 "	.47
	Control			12 "	1.26			16 "	.99	15 "	.85	31 "	.34

Grazing trials are now being started on these three pastures grasses.

GROUNDNUTS.

100. Variety Trial

Five varieties were tested in a randomised block layout, in the Orange Walk District.

Results Variety	Yield per acre in lbs. 1957	 1958	Dry Weight 1959	3 years Average
MT 371	360	1911	835	1102
279-6	2312	726	287	1108
MD 351	1598	1839	783	1410
537A	1360	1936	796	1364
Samaru 38	1972	1379	991	1446

Yields were depressed considerably in 1959 due to drought in the growing season.

Variety	Avg. yield of 5 plots.	Avg. pod/plant	3 year Avg. yields/acre	Avg. germination%
MT 371	835	13	1102	82
279-6	287	10	1108	21
MD 351	783	14	1410	76
537A	796	19	1364	52
Samaru 38	991	16	1447	66
	3592	72	6431	297
Average	718	14	1286	59

Average

Germination on a whole was poor. Samaru 38 appeared in general to be the best yielder.

101. CANE RESEARCH 1960

A. Varieties: Only two variety trials were harvested during the year, and any conclusions drawn at this time, must therefore be very tentative. However there are two varieties which appear to give better yields than the standard cane POJ 2878. These are B4098 and B41227. In trial No. 3 they have out-yielded POJ 2878 by approximately 6 tons and 4 tons of cane per acre respectively. In trial No. 6 they have both (statistically) out-yielded POJ 2878, by approximately 7 tons of cane per acre.

102. Of the five varieties harvested in two trials in 1960, POJ 2878, B41211, B41227, B4098, and B37161, the one with the least prospect of becoming of commercial importance in B41211, this closely followed by B37161. Neither B3337 nor B34104, each harvested in only one trial, appear as canes with a possible commercial future.

103. B. Fertilizer Applications: Of the four fertiliser trials reaped in 1960, yield increases have been produced by applying more nitrogen and phosphates. Generally the increase from applying both forms of nutrients simultaneously has been larger than that produced by applying either one

or the other singly, i.e. there is an additional yield increase due to the interaction of the two fertilisers. There is no doubt whatever that nitrogen is the main fertiliser required to produce the best returns.

104. Only two of the four trials has potash treatments, and in both there were small responses. There was an indication in trial No. 2 that potash becomes a limiting factor only at the higher levels of Nitrogen and phosphate application. However if maximum yields are to be obtained from sugar cane, farmers will have to apply more fertilisers than previously, and it may be that as these heavier dressings of nitrogen and phosphate fertilisers are applied year after year, potash may become more and more necessary to ensure the continuity of maximum yields of cane.

105 NEW CANE TRIALS.

3 x 3 x 3: NPK SERIES, using POJ 2878.

Two complete 27 plot trials were laid down during the year. The sub-blocks are arranged on 3 blocks of 9 with the higher order interactions confounded with sub-blocks. One is on the black Louisville soils found at the station in San Roman, the other at Xaibe on Red soils. Fertilisers used are 100, 200, 300 lb. per acre Sulphate of Amonia 21% N. 50, 100, 150 lb. per acre, T. Superphosphate 46% P2 05, and 0, 50, 100 of Muriate of Potash 40% K. Monthly collections of leaf blade material TVD leaf were made, starting from when trials were 3 months old. These will be collected until plants reach the age of 9 months. Analysis of these samples should provide results to correlate with trials per yields, thus determining optimum content of N P K in leaf blade material of plant cane at various ages and varying climatic conditions.

106. 3 x 3 x 2 N P K Series POJ 2878

4 trials of 18 plots arranged in 3 sub-blocks of 6 were planted out at the following places - Calcutta, San Pablo, Douglas and Santa Cruz. These trials are all on farmers' fields and have been superimposed on land prepared and planted by normal methods employed by the farmers concerned. Fertilizer levels 100, 250, 400 lb. per acre Sulphate of Ammonia

100, 200, 300 lb. per acre Triple Superphosphate

0, 100 lb. per acre Muriate of Potash.

107. High Level N P K Series

A 3 x 3 Latin square fertiliser trial was superimposed on cane planted at San Roman and used as a cultivation trial formerly.

Fertilizer levels 1) 200 lb. S.A., 100 lb. T. SP; 100 lbs. KCL per acre.

2) 400 lb. S.A., 200 lb. T. SP; 200 lb. KCL per acre.

3) 600 lb. S.A.; 300 lb. T. SP; 300 lbs. KCL per acre.

NEW CANE VARIETIES IMPORTED FROM BARBADOS

108. Setts of the undermentioned new varieties were received and planted out. B3439 (failed to germinate) B 42231; B4362; B45151; B45152; B 5401; B 5480; B52107 (failed to germinate) B54142 (failed to germinate) B 54277.

FINANCE

109 Expenditure for 1960.

(a)	Local Budget	$	
	Personal Emoluments	63,892.59	
	Other Charges	113,771.54	
	Capital	8,790.39	
			$186,454.52
(b)	D. & W. Funds.		
	Personal Emoluments	58,413.15	
	Other Charges	104,966.02	
	Capital	-	
			$163,379.17
(c)	Hurricane Rehabilitation		
	Personal Emoluments	6,124.79	
	Other Charges	4,033.05	
	Capital	-	
			$ 10,151.84
			$595,111.71

REVENUE FOR 1960

LOCAL BUDGET	$	
Sale of Govt. Stores	564.09	
Receipts from Central Farm	1,212.83	
Sale of Plants & Produce	8,599.44	
Fees Veterinary Officer's Services	20.50	
		$ 10,396.86
D & W		
Scheme D3439 Sale of Cocoa	3,907.06	
Scheme D3441 Sale of Dairy Products	5,010.11	
		$ 8,917.17
		$ 19,314.03

110 VISITORS

H.R.H. The Princess Royal

H.E. Sir Colin Thornley K.C.M.G., C.V.O., Governor

Sir Roland Robinson

Mr. Vaughan - Morgan M.P.

Mr. R. Stollmeyer W.I. Trade Commissioner in Canada

(M.K. CHOPIN)
Chief Extension Officer
for Chief Agricultural Officer.

APPENDIX I

LIVESTOCK

LIST OF MAIN TREATMENTS CARRIED OUT BY FARM DEMONSTRATORS AND LIVESTOCK ASSISTANTS IN 1960

DISEASE OR TREATMENT	HORSES	CATTLE	PIGS	SHEEP	POULTRY	DOGS
Worming	118	185	184	25	400	69
Castration	55	146	452	46	-	9
Distemper	56	-	18	-	-	10
Mange	27	2	8	1	-	1
Wounds and Screw Worm Infestation	28	50	2	8	-	2
Colic	13					
Retention of Urine	11		1			
Mastitis		9				
Infectious Warts	4	30				
Fowl Pox					25	
Coccidosis					1,100	
Pneumonia (All Causes)			41			
Spraying	36	279				
Influenza			1			
Corysa					10	
Lampas	18					
Miscellaneous Complaints	76	44	67	4	534	420
Removal Placenta		12				
Preventive Vaccination						
Newcastle Disease					468	
Rabies						2

APPENDIX II

SLAUGHTER HOUSE RETURNS 1960

DISTRICT	KIND	NO.	DRESSED WEIGHT LBS.	AV. DRESSED WT. PER ANIMAL LBS.
BELIZE	Cattle	2,864	707,715	247
	Pigs	4,789	250,917	52
	Sheep	134	3,438	24
TOLEDO	Cattle	27	7,121	271
	Pigs	133	9,307	69
	Sheep	3	102	34
CAYO	Cattle	329	69,898	212
	Pigs	627	44,609	71
	Sheep	30	1,133	37
STANN CREEK	Cattle	117	39,319	336
	Pigs	78	7,148	91
	Sheep	6	234	39
ORANGE WALK	Cattle	107	13,140	122
	Pigs	257	18,090	70
	Sheep	-	-	-
COROZAL	Cattle	110	25,729	233
	Pigs	55	3,885	70
	Sheep	-	-	-

AVERAGE DRESSED WEIGHTS FOR COUNTRY PER ANIMAL

CATTLE	236 lbs.
PIGS	71 lbs.
SHEEP	34 lbs.

APPENDIX III

METEOROLOGICAL DATE - 1960

	TEMPERATURE Mean Monthly Maximum				TEMPERATURE Mean Monthly Minimum				RELATIVE HUMIDITY Mean Monthly				PSYCHROMETRIC DATA Mean Monthly			
Months	Belize	Stann Creek	Toledo	Central Farm	Belize	Stann Creek	Toledo	Central Farm	Belize	Stann Creek	Toledo	Central Farm	Belize	Central Farm	Toledo	Stann Creek
Jan.	85	81	N.A.	78	71	68	N.A.	63	83	80	N.A.	82	70	67	N.A.	69
Feb.	84	82	85	84	67	64	63	61	81	73	81 8	80	70	66	71	67
March	83	83	84	84	68	68	67	61	79	75	77	78	71	70	71	65
April	87	87	N.A.	88	73	71	N.A.	66	79	76	N.A.	80	74	72	N.A.	76
May	89	86	90	91	76	73	72	70	76	78	76	76	74	76	77	77
June	90	89	89	88	73	74	73	71	74	79	85	75	75	76	79	77
July	89	84	88	87	78	71	72	70	75	75	94	73	73	76	81	74
August	89	88	88	88	75	74	73	72	74	80	94	81	75	76	81	77
September	88	88	89	87	79	73	75	70	72	79	91	75	75	75	80	77
October	86	88	88	86	79	73	74	72	80	80	91	79	76	78	81	75
November	81	84	85	81	77	71	70	67	89	80	81	89	73	73	70	73
December	N.A.	81	81	85	N.A.	66	65	64	N.A.	79	84	88	N.A.	67	66	68

SUMMARY FOR RAINFALL 1960

APPENDIX IV

Dist. & Stations	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total 1960	Total 1959	Average 10 years
Corozal Dist. Corozal Town	1.18	.24	.06	1.52	4.80	13.10	9.84	10.17	8.59	4.52	7.07	1.15	62.24	35.75	48.63 (A)
Corozal Agstat	1.12	.27	.07	2.00	6.31	15.17	11.92	11.43	21.79	4.73	6.03	1.58	82.42	36.26	?
Louisville	1.46	.66	Nil	1.42	9.26	8.14	7.30	8.29	11.43	8.46	7.35	1.35	65.12	35.17	53.61
Pembroke Hall	1.10	Nil	Nil	2.02	7.15	9.27	5.18	6.94	13.20	6.28	6.76	1.13	59.03	30.85	47.63 (C)
Orange Walk Dist. Orange Walk Town	2.63	1.29	.31	3.27	2.65	6.72	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Gallon Jug	1.25	.38	1.34	3.60	6.54	15.10	6.92	7.28	9.17	5.87	9.34	2.69	69.48	58.66	61.45
Fresh Water Creek	2.96	1.08	.63	3.31	10.68	15.28	10.97	5.60	10.62	6.07	4.32	1.33	72.85	85.86	89.24
August Pine Ridge	1.10	.35	.20	1.30	2.10	3.80	2.05	6.71	9.05	6.80	3.34	1.89	38.69	29.20	54.68 (A)
Orange Walk Agstat	1.73	.66	.40	3.41	4.96	7.80	5.57	7.15	9.01	6.91	6.58	1.75	55.93	31.92	N.S.
Belize District Belize Town	2.62	1.65	1.16	1.52	3.32	5.11	7.15	6.24	9.03	17.02	18.70	4.36	77.88	45.97	69.64
Salt Creek Estate	3.12	.95	Nil	2.37	5.47	4.47	7.82	7.45	9.47	8.95	12.10	4.52	66.69	51.72	64.07 (A)
Gracie Rock P.F.	2.73	.47	.84	1.48	3.89	15.54	7.89	16.64	9.53	12.11	12.71	4.71	85.34	49.86	78.41(A)
Maskall	2.71	.76	.06	4.46	5.32	5.84	6.54	6.77	11.44	9.39	9.53	2.13	64.95	42.18	62.27 (A)
Stanley Field	2.64	1.20	.68	3.72	6.17	5.17	6.82	6.90	6.93	9.79	15.39	5.00	63.41	49.82	64.04 (A)
Lucky Strike	3.27	.52	Nil	1.42	3.75	5.11	5.44	6.22	11.28	11.29	9.90	4.11	62.31	47.40	63.82 (A)

CAYO DISTRICT CAYO TOWN	1.62	.67	1.41	5.43	4.03	9.81	7.32	7.27	15.12	2.04	10.56	7.70	72.98	50.06	52.98
Central Farm	1.38	1.21	1.79	3.64	2.73	11.79	7.85	9.43	13.48	6.02	12.68	5.22	77.22	73.01	62.41
Augustine F. Sta.	1.78	1.16	1.43	2.75	1.22	10.67	6.06	5.33	27.66	5.93	13.84	4.59	82.42	73.32	64.17
Benque Viejo	.47	.40	1.13	2.49	1.84	5.11	6.14	3.70	16.14	5.29	8.35	2.54	53.60	50.54	53.54(A)
Roaring River	2.49	1.34	2.60	3.32	2.44	12.91	13.13	8.53	13.26	7.25	12.52	5.03	84.82	80.38	83.84(B)
Sibun Camp	3.05	3.29	1.41	4.86	4.07	20.27	14.40	9.92	12.90	9.91	21.25	5.41	110.74	100.77	N.S.
Norland	1.51	1.28	.93	3.65	1.41	11.61	7.07	8.95	15.27	3.10	11.47	4.25	70.50	63.91	61.37(A)
Caves Branch	3.16	2.45	1.98	3.52	4.48	16.20	9.89	10.43	13.04	11.16	16.37	5.75	98.43	86.51	N.S.
Never Delay	3.67	2.51	1.16	2.95	2.89	11.87	6.53	11.82	14.55	7.97	7.21	3.17	76.30	68.98	N.S.
Cooma Cairn	2.71	2.67	N.A.	2.90	N.A.	10.38	9.36	N.A.	10.51	N.A.	19.06	N.A.	N.A.	83.32	N.S.
Stann Creek Dist. Stann Creek Agstat	5.68	1.60	1.68	3.31	5.69	13.73	10.06	10.53	12.19	12.24	12.12	4.75	93.58	69.54	85.03
Cow Creek	4,93	1.59	2.32	4.76	3.27	18.21	15.29	16.35	12.79	16.00	14.81	5.73	116.05	92.45	N.A.
Alta Vista	5.28	1.84	2.15	3.78	2.97	20.49	13.43	14.62	13.85	14.91	13.62	4.83	111.77	95.72	N.A.
Middlesex	4.68	1.76	2.44	3.74	2.60	17.74	15.47	15.50	8.72	9.48	11.34	3.17	96.64	90.12	104.04
Melinda Farm	6.47	1.67	2.69	3.91	7.08	13.40	10.57	10.53	13.47	9.90	15.82	5.69	101.24	71.97	89.20
Pomona	5.98	2.59	1.97	2.77	[illegible]	18.21	10.39	12.30	14.71	15.06	10.22	4.78	102.35	81.59	93.98 (A)
Savanah Forest Sta.	4.68	1.21	2.26	2.71	3.22	19.31	12.93	11.74	14.28		9.37	6.29		86.28	
Sittee River	5.15	1.13	1.59	3.43	4.50	11.71	6.02	9.03	5.07	12.04	14.09	3.08	76.84	65.27	N.A.
TOLEDO DISTRICT Punta Gorda Town	12.48	1.67	1.10	3.17	9.98	19.93	20.85	37.58	18.49	20.01	12.37	6.09	158.72	155.00	150.40

Punta Gorda Agstat	9.72	3.20	1.94	1.57	8.79	26.75	28.59	31.28	14.00	20.23	7.59	3.95	157.61	191.16	150.09
San Antonio	6.40	1.27	1.29	1.32	7.01	14.39	17.91	18.85	16.54	7.09	7.30	4.85	104.22	N.A.	N.A
Barranco	10.23	3.35	4.73	5.25	12.42	31.42	31.30	35.84	28.05	17.37	14.31	6.13	200.38	252.85	N.A.
Hunting Caye	N.A.	3.35	3.81	2.64	1.97	3.98	N.A.	16.30	N.A.	N.A.	N.A.	N.A.	N.A.	90.08	N.A.
Crique Sarco	Nil	2.67	2.10	8.52	3.65	26.64	33.74	43.13	18.43	11.42	5.60	4.55	161.91	N.A.	N.A.
Machaca Camp	7.70	1.79	1.68	3.09	6.28	14.79	20.51	24.22	18.83	9.97	9.63	4.07	122.56	132.80	130.36(C)
Monkey River	10.21	11.10	5.09	5.77	13.15	20.86	21.14	17.30	13.31	21.59	14.34	6.28	158.03	107.25	N.A.
Columbia Forest Sta.	8.83	2.01	1.88	3.77	7.03	16.90	22.21	21.03	20.11	9.42	11.61	4.77	129.48	N.S.	N.S.

NOTE :- A - 8 years. B - 7 years. C - 5 years. O - No records. N.A. - Not available. N.S. - New Static

APPENDIX V

AGRICULTURAL IMPORTS 1960 - CUSTOMS DEPARTMENT FIGURES

ITEM	NO.	QUANTITY	VALUE
Cattle for breeding	No.	46	25,980
Poultry for breeding	No.	73,385	26,584
Butter	x 100 lb.	1,334	104,032
Cheese	x 100 lb.	2,836	162,793
Cocoa prepared	x 100 lb.	405	35,629
Coffee - Ground	x 100 lb.	298	76,117
Eggs, fresh	doz.	9,564	8,317
Fish - fresh frozen	x 100 lb.	98	1,847
- Dried or salted	x 100 lb.	103	3,052
- Preparations	x 100 lb.	1,002	43,038
Rice	x 100 lb.	50,000	536,250
Flour	x 100 lb.	134,494	845,401
Peas and Beans R.K.	x 100 lb.	11,747	200,899
Lard & Subsititutes	x 100 lb.	17,782	359,128
Meat Products - in barrels	x 100 lb.	4,601	126,718
- canned	x 100 lb.	3,379	150,321
Ham & Bacon	x 100 lb.	1,129	89,279
- Fresh	x 100 lb.	10	176
- Evaporated & condensed	x 100 lb.	39,261	837,026
- Powdered	x 100 lb.	2,422	65,946
Maize	x 100 lb.	15,733	76,286
Sugar-Refined	x 100 lb.	15,739	130,293
Spices	x 100 lb.	296	25,786
Vegetables - Potatoes	x 100 lb.	12,147	88,859
- Other fresh	x 100 lb.	8,471	93,321
- Canned	x 100 lb.	2,987	81,172
Tobacco - Manufactured	lb.	75	651
- Unmanufactured other	lb.	71,045	64,186
- Cigarettes	lb.	74,556	186,615
		TOTAL	$ 4,445,702

APPENDIX VI

AGRICULTURAL EXPORTS 1960 - CUSTOMS DEPARTMENT FIGURES

ITEM	NO.	QUANTITY	$ VALUE
Bananas	Bunches	3,896	2,205
Citrus - Grapefruit fresh	x 100 lb.	35,985	189,974
Grapefruit juice	x 100 lb.	19,283	183,822
Grapefruit segments, canned	x 100 lb.	50,861	722,363
Grapefruit concentrate	x 100 lb.	1,906	59,089
Grapefruit Oil	lb.	2,340	4,322
Oranges Fresh	x 100 lb.	1,552	1,793
Orange Concentrate	x 100 lb.	11,899	509,787
Orange juice	x 100 lb.	77,004	1,420,130
Orange Oil	lb.	76,721	36,829
Coconuts - Nuts	x 100 nuts	9,497	49,085
- Copra	x 100 lbs.	971	9,266
- Dessicated	x 100 lbs.	797	5,570
Cocoa - Beans	x 100 lbs.	-	9,991
Cohune - Kernels	x 100 lbs.	3,085	26,233
Fruit - various	lb.	61,291	1,781
Honey	lb.	62,451	6,133
Hides and skins			35,188
Sugar - unrefined	x 100 lb.	263,132	2,026,359
- other sugar & syrup	galls.	638,575	81,790
Eggs - fresh	doz.	12,539	7,531
Fish - fresh	lb.	103,479	20,421
- dried	lb.	24,855	3,675
Lobsters (whole & tails)	lb.	363,720	276,147
Lime - oil	lb.	500	4,640
Shrimps	lb.	3,805	573
		TOTAL -	$ 5,694,697

APPENDIX VII

LOCAL WEIGHTS AND MEASURES

1 quartia - ½ almud - 2½ quarts

1 almud - 5 quarts

1 benequen - 15 quarts

1 shushack - 4 almuds

1 cargo - 60 quarts - 12 almuds

1 barrel -110 quarts

300 ears of corn in husk - 60 hands
1 hand - 5 ears i.e. the number picked up in each hand when counting ears
60 hands - 300 ears - (should shell out to) 1 cargo

1 mecate - 1 task - 25 yards x 25 yards approximately one-eight acre
16 mecates - 1 manzana - approximately 2 acres
(8½ varas plus 1 machete length - 1 mecate)

1 cart load firewood - 300 sticks at 3 feet long

1 fathom - 6 feet - brassada

(Brassada is literally the distance between out-stretched arms (brazos))

Citrus

A unit of grapefruit is a 70 lb box

A unit of oranges is a 90 lb box

A/2 juice carton contains 24 x 12 oz tins

A/10 juice carton contains 12 x 24 oz tins

Barrels contain 43 gallons

4 British Honduras Dollars equal £1 Sterling

1 British Honduras Dollar equals Five Shillings Sterling